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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/123,486	07/28/98	BINDER	Y 1332/1

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EXAMINER

TRAN, M

ART UNIT

PAPER NUMBER

2664

DATE MAILED:

03/13/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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Office Action Summary

Application No.

09/123,486

Applicant(s)

BINDER, YEHUDA

Examiner

MAIKHANH T. TRAN

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-- The MAILING DATE of this communication, appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-3, 5-9, 12-34, 40, 47, 49-51, 53-57 and 60-71 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 54, 55, 67 and 68 is/are allowed.
- 6) ☐ Claim(s) 1-3, 5-9, 12-32, 40, 47, 49-51, 60-66 and 69-71 is/are rejected.
- 7) ☐ Claim(s) 33 and 34 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 14) ☒ Notice of References Cited (PTO-892)
- 15) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 16) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 17) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 18) ☐ Notice of Informal Patent Application (PTO-152)
- 19) ☐ Other: _____

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DETAILED ACTION

Response to Amendment

Applicant's response received on Feb. 13, 2001 has been fully considered and made of record. Based on the Amendment, claims 10-11, 35-39, 41-46, 48, 52, 58 and 59 have been cancelled. Claims 1, 40 and 47 have been amended. Claims 60-71 have been added. Claims 1-3 and 5-9, 12-34, 40, 47, 49-51, 53-57, 60-71 are now pending. In view of the following new ground of rejection, this office action is NOT made final.

Allowable Subject Matter

1. The indicated allowability of claims 11, 23-26, 29-30, 32, 41 and 48-51 is withdrawn in view of the discovered reference(s) to Markkula, Jr. et al (U.S. 4,918,690) and Sutterlin et al (U.S. 5,148,144). Rejections based on the cited reference(s) follow.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5-9, 12-32, 40, 47, 49-51, 60-66 and 69-71 are rejected under 35

U.S.C. 103(a) as being unpatentable over Markkula, Jr. et al (U.S. 4,918,690) further in view of Sutterlin et al (U.S. 5,148,144).

Markkula, Jr. et al, in figs. 1, 10, summary and col. 3, line 61 - col. 5, line 40, show a local area network comprising conditions (a)-(d) and at least one of said SICs receives electrical power via the electrically-conducting media as claimed.

- As to claims 1 and 40, Markkula, Jr. et al fail to teach that at least one of said electrically-conducting media is used to carry both LAN data and electrical power; and the LAN data and the power are combined using FDM. Sutterlin et al, in figs 3-4 and the description associated with the figs., disclose a LAN network for data communications, sensing, and control comprising conditions (a)-(c) and at least one of said SICs receives electrical power via the electrically-conducting media. Moreover, Sutterlin et al also suggest that data information and power are delivered on the same cable (i.e. same electrically-conducting media) and that FDM is one of conventional way to combine the data and power over the same electrically-conducting media (see col. 1, lines 14-30). Therefore it would have been obvious to ones skilled in the art at the time the invention was made to apply Sutterlin et al' teaching in Markkula, Jr. et al by using electrically-conducting media to carry both LAN data and electrical power; and using FDM technique to combine the LAN data and the power for simultaneous distribution of power and

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data information along the same cable in Markkula, Jr. et al but still eliminating interferences that may occur between power signals and data signals.

- As to claims 2-3, Markkula, Jr. et al teaching encompasses the claimed limitations .
- As to claims 5-6, Markkula, Jr. et al teaching encompasses the claimed limitations (see Appendix C in col. 86).
- As to claim 7, Markkula, Jr. et al teaching encompasses the claimed limitations (see col. 61, line 52- col. 62, line 6).
- As to claim 8, each cell in Markkula, Jr. et al is powered from an electrical power main (power supply).
- As to claim 9, in Markkula, Jr. et al, each cell can deliver electrical power.
- As to claims 12-13, it is inherent that in Markkula, Jr. et al, at least one cell is housed within a telephone outlet, and said outlet allows connections to telephone services and to the local area network (see Appendix C in col. 86).
- As to claims 14-15, in Markkula, Jr. et al, cell 21 is housed within an electrical outlet that allows connections to electrical power and to the local area network (see col. 4, lines 19-25).
- As to claim 16, see Appendix C in col. 86
- As to claim 17, in Markkula, Jr. et al, each cell includes an address (see col. 5, lines 1-2).

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- As to claims 18 and 56, although Markkula et al do not clearly suggest how the address is assigned to the cell, manual and automatic address assignment is well known in the art. Either one or both techniques can be applied to communications systems appropriately.

- As to claim 19, in Markkula, Jr. et al, each cell receives electrical power locally.

- As to claims 20 and 22, in Markkula, Jr. et al, each cell receives electrical power via a dedicated power line/electrically-conducting media (see fig. 1).

- As to claims 23-24, 47, 49, 60-61 and 69, Markkula et al, however, fail to teach that at least one of said SICs comprises a telephony/data splitter/combiner. Sutterlin et al, in figs 3-4 and the description associated with the figs., disclose a LAN network for data communications, sensing, and control comprising conditions (a)-(c) and at least one of said SICs receives electrical power via the electrically-conducting media. Moreover, Sutterlin et al also suggest that data information and power are delivered on the same cable (i.e. same electrically-conducting media) and each cell of said SICs comprises a transformer for splitting/combining data/power. Therefore it would have been obvious to ones skilled in the art at the time the invention was made to apply Sutterlin et al' teaching in Markkula, Jr. et al by using that transformer in Markkula, Jr. et al for simultaneous distribution of power and data information along the same cable, and by that way reducing means for separately receiving and transmitting power and data information.

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- As to claims 25-26, 50-51, 62-63 and 70-71, the teaching in Sutterlin et al encompasses the claimed limitations (see the Summary and col. 9, lines 41-57).

- As to claims 21, 28 and 31, in Markkula, Jr. et al, each cell (20) comprises : a line interface, a modem (111), a control block (100); and a power supply (30), and each cell further comprises a communications interface (29) and a telephone interface (not shown).

- As to claims 27 and 57, in Markkula, Jr. et al, each cell (20) comprises : a line interface, a modem (111), a control block (100); and a power supply (30), and each cell further comprises a communications/payload interface (29) and a sensor/actuator.

- As to claims 29-30 and 64-65, it is inherent that the LAN networks in Markkula, Jr. et al and Sutterlin et al, each cell comprises a computer bus connector (not shown) for adding a new cell to the LAN network and by that way extending the communications network.

- As to claim 32, 53 and 66, Markkula, Jr. et al do not clearly teach that one of said SICs is interconnected to a public telephone network interface. Nowadays, voice and data are widely multiplexed and transmitted over the same path by connecting a telephone to a PC (considered as a SIC) and the PC/cell coupled to a public telephone network to transmit voice signals to the destination. Therefore it would have been obvious to ones skilled in the art at the time the invention was made to interconnect at least one of the SICs in Markkula et al to a public telephone network interface for conveying voice data to other networks.

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Allowable Subject Matter

4. Claims 33-34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 54-55 and 67-68 are allowed.

6. The following is an examiner's statement of reasons for allowance:

- As to claims 33-34, 54-55 and 67-68, the prior art of the record fail to teach that at least one of said cells is connected to a high data rate connection whose bandwidth is multiplexed to at least one other of said cells.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maikhanh Tran whose telephone number is (703) 308-7911. The examiner can normally be reached on Monday-Friday from 8:00 AM to 4:00 PM.

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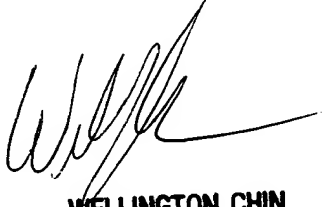
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached on (703) 305-4366. The fax phone number for this Group is (703) 305-3988.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Maikhanh Tran

March 9, 2001



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